

### ABSTRACT OF THE DISCLOSURE

A planar lightwave circuit comprises a first portion of a waveguide, a second portion of a waveguide, and a segment of crystal core fiber coupling the first portion to the second portion of the waveguide. The crystal core fiber helps to reduce the polarization sensitivity of the waveguide. In one embodiment, multiple crystal core fibers are used in a planar lightwave circuit having multiple waveguides, such as an array waveguide grating.